

REMARKS

Claims 1, 41, 50, 55, 58, 95, 106, 109, 110, 111, and 112 have been amended. No additional claims have been added or canceled. Claims 1, 3 – 51, 54, 55, 57 – 85, 89 – 100, 103 – 106, 109 – 112, 114, 119, 122, and 143 remain for examination. It is respectfully submitted that all remaining claims now stand in condition for allowance. Accordingly, reconsideration and withdrawal of all outstanding rejections is requested at this time.

As regards all remaining claims, the previous 35 U.S.C. 103(a) rejections are in each case based upon the combination of U.S. Patent 4,522,857 to Higgins in view of U.S. Patent 5,610,207 to De Simone and U.S. Patent 5,540,968 to Higgins alone or in combination with EP 048 986 to Dow or U.S. Patent 5,616,200 to Hamilton. More specifically, as best understood, the fundamental rationale for all rejections is that it would have been obvious to one of skill in the art to substitute a rebond foam product of De Simone '207 for the foam layer in Higgins '857 and to omit the carrier layer of Higgins '857 in view of Higgins '968.

As described on pages 42 and 43 of the present application, rebond foam pads for broadloom carpet were known. Such rebond foam pad typically had large chip sizes, low density, non-uniform density, was frangible, fragile, and relatively thick. Also, such rebond foam pads were not used in preformed carpet tiles prior to the invention described in commonly owned U.S. Patent Application 09/721,871 and as described in the present application.

Applicants submit herewith a declaration of Mr. Norton. A copy of this Mr. Norton declaration is appended for incorporation into the present record.

As described in the Kilpatrick and Norton declarations, it would not have been obvious for one of ordinary skill in the carpet tile art to use rebond foam in a cushion back carpet tile.

Milliken & Company had two rebond foam cushion back carpet tile products on the market, the Legato™ carpet system and the Tesserae™ carpet system. At least Milliken's Legato™ carpet system (sold in Home Depot stores) enjoyed commercial success.

It was surprising and unexpected that a polyurethane rebond foam would work in a cushion back carpet tile, much less a carpet tile rated for commercial use. It took many years for Milliken to develop a performing carpet tile which has a similar look and feel as residential broadloom.

As set forth, for example, in pages 87 - 90 of the present application, cushion back carpet tile samples having the same construction as Milliken Comfort Plus® cushion back carpet tiles with the exception of rebond foam (flame laminated to fiber- glass and felt) rather than filled polyurethane foam (in-situ laminated to the fiberglass and felt) (same face construction, same layer construction) were tested and surprisingly and unexpectedly found to have performance characteristics at least on par with filled polyurethane cushion back carpet tiles and to be rated for commercial use.

Mr. Norton has concluded that contrary to the position taken by the Office Action, one of skill in the art would not have been motivated to substitute the foam layer in the tile disclosed in Higgins '857 with the rebond foam materials from De Simone '207.

As best understood by Applicants, De Simone '207 is not directed to carpet tile. Also, it appears that De Simone '207 is not directed to attached cushion broadloom carpet. It appears that De Simone '207 is directed to low density recycled foam pad. Column 2, lines 40 – 45 of De Simone '207 appear to refer to making a tri-laminate pad with a central layer of foam pieces and upper and lower layers of preferably polyurethane foam but which could be natural or synthetic materials, like metal, wood, and woven or unwoven fabrics, eg. "carpet backing" but which are preferably polyurethane foam. Typical carpet backing fabrics are jute or polypropylene. It is believed that De Simone '207 is directed to making pad or underlayment for use with separate, unattached broadloom carpet rather than for making attached cushion broadloom (roll goods) and is in no way directed to making carpet tile. Applicants believe that the reference to "carpet backing" in De Simone '207 is an example of woven or unwoven fabrics rather than to putting the recycled foam pieces of De Simone '207 on the back of carpet. De Simone '207 does not state "carpet". It states "carpet backing" as an example of fabric. It is known in the rebond pad industry to put a scrim on a rebond foam pad or underlayment. Applicants respectfully believe that De Simone '207 is directed to unattached pad or underlayment rather than to attached cushion broadloom. None of the Examples in De Simone '207 appear to have an upper or lower layer of fabric, much less carpet. The upper and lower layers in the Examples of De Simone '207 appear to be foam layers. Hence, De Simone '207 is not directed to carpet tile, does not enable rebond foam backed carpet tile, and does not enable rebond foam backed broadloom carpet.

Further, as De Simone '207 is not directed to carpet tile or even attached cushion broadloom carpet, neither De Simone '207 nor Higgins '857 provide the necessary motivation or suggestion for combination or for substituting the recycled foam of De Simone '207 for the foam layer of Higgins '857. As described earlier and as agreed to by the Examiner, it would not have been obvious to substitute rebond foam for the virgin foam in a carpet tile. It would have been even less obvious to substitute a low density rebond foam for virgin foam. Further, it is not obvious to combine pad or underlayment art (De Simone '207) with freelay carpet tile art (Higgins '857) as carpet tiles, especially freelay carpet tiles, are required to be dimensionally stable.

As one of skill in the carpet tile art would readily understand, changes to a dimensionally stable carpet tile structure, even one layer in a stable structure (such as a freelay tile like Higgins '857), are not taken lightly, are viewed with skepticism, and are not done by even experts in the carpet tile art to save money, reduce mass, or the like (see Mr. Norton declaration).

Prior to the present invention, carpet tiles were known and rebond foam pads were known but those skilled in the carpet tile art did not use rebond pad in carpet tiles. One of skill in the carpet tile art would not substitute rebond foam pad (low density recycled foam of De Simone '207) for the foam layer in a carpet tile. One of skill in the carpet tile art would not look to De Simone '207 for motivation or suggestion in modifying the Higgins '857 carpet tile structure.

The Higgins '857 carpet tile effectively has two stabilizing layers (layers 18 and 26). As Higgins '857 is directed to a stabilized, freelay carpet tile, one of skill in the carpet tile art would not remove one of the stabilizing layers. One does not make changes to a stable carpet tile structure in light of the many tile failures over the years, changes in one layer can effect the dimensional stability of the tile (cause cupping and curling, delamination), and the like. Adding a layer or substituting a new material for a layer can have a devastating instantaneous or latent effect on a carpet tile, especially a freelay carpet tile.

Figures 3A and 3B of Higgins '968 do not show a layer of adhesive between reinforcement material 158 and foam 178. Given the teachings of Higgins '968, one would not remove carrier layer 26 of Higgins '857. Figures 3A and 3B of Higgins '968 show a structure without a layer like layer 18 of Higgins '857. Hence, even a hypothetical combination of Higgins '857 and Higgins '968 would not lead one to the claimed invention but would lead one away from it.

As best understood, the conclusion of obviousness reached by the Patent Office is based on the following proposition:

It would have been obvious to one of skill in the art to substitute a rebond foam pad of De Simone '207 for the foam layer of Higgins '857, and

to eliminate the carrier layer 26 of Higgins '857 and to add a backing material to Higgins '857 in view of Higgins '968.

Applicants respectfully submit that this conclusion is erroneous and inconsistent with the teachings of the cited art when considered in the context of the accepted wisdom held by those of skill in the art at the time the current application was filed. Thus, the conclusion by the Patent Office appears to not be supported by what the skilled person would have been motivated to do (or to not do).

As noted at MPEP §2142, to reach a proper determination under 35 U.S.C. 103, the Examiner must step back in time and into the shoes worn by a person of ordinary skill in the art when the invention was unknown and just before it was made. In view of all factual information, the Examiner must then make a determination of whether or not the claimed invention as a whole would have been obvious at that time to that person. Impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art. Certainly, Applicants recognize that any judgment of obviousness is in some sense necessarily a reconstruction based on hindsight reasoning. However, such reconstruction may take into account only knowledge that was within the level of ordinary skill in the art at the time the claimed invention was made. See, MPEP §2145(X)(A).

The ultimate determination of patentability must take into account the entire record. The decision is based on the legal standard of "a preponderance of evidence." With regard to rejections under 35 U.S.C. 103, the Examiner must provide evidence which as a whole shows that the legal determination of obviousness is more probable than not. See, MPEP §2142.

Thus, the essential query centers on what a person of skill in the art having the benefit of

the cited references but without the benefit of the present application would have considered obvious at the time the invention was made. If the preponderance of the evidence does not weigh in favor of finding that the claimed invention would have been obvious to such a person, then the rejection cannot be maintained.

In his declaration, Mr. Norton notes that in actual practice, despite an interest in reducing material costs for the tile disclosed in the Higgins '857 patent, the density was maintained at about 16 pounds per cubic foot due to concerns over cushion quality and the effect on dimensional stability, long term durability and installation performance. Thus, the Office Action's proposed substitution of the low density foam pad of De Simone '207 for the high density foam layer of Higgins '857 would be inconsistent with actual historical design practices.

Applicants respectfully submit that the prior remarks and disclosures regarding performance of Applicants' carpet tile with rebond foam are sufficient to establish unexpected results and to support patentability in light of the overwhelming evidence weighing against the position of *prima facie* obviousness. In this regard, Applicants note that while an unexpected result may be evidence of nonobviousness it is not a requirement. On this point the Examiner is respectfully referred to the case of *American Hoist & Derrick Company v. Sowa & Sons, Inc.*, 220 USPQ 763, 771 (CAFC, 1984) which notes that a patentable invention may result even without the existence of a new and unexpected result and function.

The Examiner has already acknowledged that the earlier filed declarations establish the accepted wisdom in the art that rebond foam would not be suited for carpet tiles. As noted at MPEP §2145, proceeding contrary to accepted wisdom is evidence of nonobviousness. In addition, Mr. Norton's declaration outlines numerous perceived disadvantages of rebond foam that would weigh against its use in the manner proposed by the Office Action.

In view of the fact that the carpet tile of the Higgins '857 patent is specifically stated to be suitable as a freelay commercial carpet tile, it is respectfully submitted that the evidence of

record weighs particularly heavily against the conclusion that the modification proposed by the Office Action would be obvious. In this regard, Applicants note that the data in De Simone '207 actually weighs against the proposed modification since it would be considered to place dimensional stability at risk. Applicants further note that there is no indication in De Simone '207 that the rebond foam as described can be placed in a carpet tile. The design requirements for carpet tile are particularly rigorous due to concerns over dimensional stability and the like. Thus, it is respectfully submitted that the data in De Simone '207 showing reduced physical performance characteristics actually weigh against the proposed placement of rebond foam in a carpet tile.

In order to reach the invention as claimed, the cited Higgins '857 structure would not only have to be modified to incorporate a rebond foam cushion but would also have to be modified to eliminate one of the stabilizing layers, to add a backing material, and the like. Applicants respectfully submit that such a major redesign weighs even further against the proposed modification and in favor of patentability.

Applicants submit herewith a sample of a commercial carpet tile representative of copying by others. Based on information provided to Applicants, the enclosed sample is of a rebond foam backed carpet tile made and sold in 2004 in Europe by a competitor of Milliken & Company. The competitor who made and sold this tile had for years a different cushion tile product (introduced in about 1995) and recently switched to the rebond foam cushion layer taught by Applicants. Applicants respectfully believe this to be sufficient evidence of copying by others which is one of the nonobviousness and patentability factors to be considered.

If the evidence is properly considered in its entirety, Applicants respectfully submit that there can be no reasonable determination that the preponderance of such evidence weighs in favor of obviousness. Unless the preponderance of evidence weighs in favor of a conclusion of obviousness, the claims must be allowed. The evidence of record establishes the accepted wisdom in the art that rebond foam would not be suited for carpet tiles. The evidence also shows

that one of skill in the art would have considered the proposed modification of the carpet tile in Higgins '857 to be problematic since the tile being modified is intended to be suitable as a freelay commercial tile. The evidence further establishes that the data in the cited De Simone '207 reference would have actually provided a disincentive to the proposed modification. In light of such evidence, as well as copying by others, Applicants respectfully submit that the conclusion of obviousness cannot be maintained and that such a conclusion is based on impermissible hindsight and is in contradiction to the controlling standards of patentability.

The other art relied upon in addition to Higgins '857, Higgins '968 and De Simone '207 fail to make up for the lack of teaching in De Simone '207.

Accordingly, reconsideration and withdrawal of all outstanding rejections is requested at this time.

CONCLUSION:

For the reasons set forth above, it is respectfully submitted that all remaining claims stand in condition for allowance.

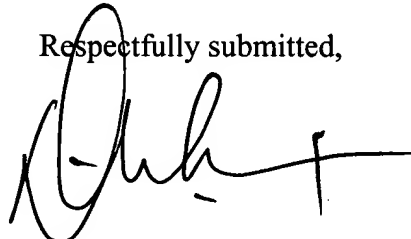
In the event that any issue remains unresolved, the Examiner is encouraged to contact the undersigned attorney in the hope that such issue may be resolved in an expedient and satisfactory manner.

To any extent required, a petition for an extension of time is hereby made and authorization is provided to deduct any fee necessary for the acceptance of this paper from Deposit Account 04-0500.

September 15, 2005

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Respectfully submitted,

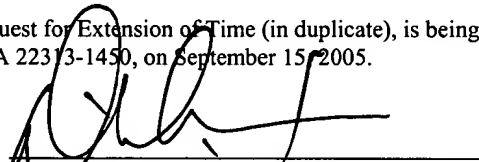


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Attachment (Norton Declaration, Carpet Sample)

CERTIFICATE OF MAILING

I hereby certify that this correspondence, along with a Request for Extension of Time (in duplicate), is being sent to the Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on September 15, 2005.


Daniel R. Alexander
Attorney for Applicant(s)